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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/572,081

02/20/2007

Dietmar Kubein-Meesenburg

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95402

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12/07/2010

LEYDIG, VOIT AND MAYER
TWO PRUDENTIAL PLAZA, SUITE 4900
180 NORTH STETSON AVENUE
CHICAGO, IL 60601

EXAMINER

WOLF, MEGAN YARNALL

ART UNIT

PAPER NUMBER

3738

MAIL DATE

DELIVERY MODE

12/07/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,081	Applicant(s) KUBEIN-MEESENBURG ET AL.	
	Examiner Megan Wolf	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/14/10 has been entered.

Response to Arguments

2. Applicant's arguments filed 9/14/10 have been fully considered but they are not persuasive. Applicant argues that Chauvin does not teach a cogging that allows an alignment of the joint relative to both a frontal and a sagittal plane of the patient because the single row of teeth positioned around the circumference of the insert prevent any kind of alignment relative to both the frontal and sagittal planes. This is not persuasive because the new claim limitation is functional and refers to an alignment of the *joint* (as a whole) rather than just the inlay with respect to the socket part. Therefore the limitation is broad enough to include alignment of the entire joint with respect to the hip socket since the cogging does not preclude the surgeon from adjusting the position of the entire joint in at least a frontal and sagittal plane. Further the inclination of the inlay of Chauvin is such that as the inlay is adjusted around the circumference of the socket part, the orientation of the articulating surface of the inlay will vary with respect to the frontal and sagittal planes. The examiner recommends amending the claims to

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better define structural features of the cogging shown in figure 3 of applicant's drawings which do not appear to be found in the prior art.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-13, 15, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubein-Meesenburg et al. 6,312,471 (hereafter referred to as Kubein-Meesenburg) in view of Chauvin EP0610146 (hereafter referred to as Chauvin).

Kubein-Meesenburg discloses an artificial hip joint, comprising a condyle 2 having a second functional surface and a joint socket 1 having a first functional surface, the first and second functional surfaces being functionally interlinked, wherein the second functional surface is non-spherical in shape and has orbital radii that differ from each other in a main functional plane relative to a secondary functional plane rotated by 90° with respect to the main functional plane, wherein the second functional surface is spindle-shaped, and wherein the diameter of the second functional surface in the frontal plane of the patient is between 0.5 and 8 mm greater than a diameter of the functional surface in a sagittal plane (col.2, ll.11-13). While Kubein-Meesenburg discloses the invention substantially as claimed, Kubein-Meesenburg discloses that the second functional surface is non-spherical while the first functional surface is spherical rather than the first functional surface being non-spherical and the second functional surface

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being spherical. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to switch the non-spherical and spherical surfaces such that the first functional surface was non-spherical and the second functional surface was spherical since it has been held that rearrangement of parts without modifying the operation of the device would be an obvious extension of prior art teachings (*In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) MPEP 2144.04 VI C). While Kubein-Meesenburg discloses the invention substantially as claimed, Kubein-Meesenburg does not disclose that the socket portion is in two parts including a socket part and an inlay wherein the first functional surface is affixable in different positions relative to the joint socket so as to individually adapt the artificial joint to the patient, the different positions corresponding to different locking stages formed by cogging formed between the socket part and inlay, the cogging allowing an alignment of the joint relative to both a frontal and sagittal plane of the patient.

Chauvin teaches a hip socket, in the same field of endeavor, wherein cogging 3b and 4b is formed between the socket 3 and inlay 4, wherein the articulating surface of the inlay is affixable in different positions relative to the joint socket, and wherein the different positions correspond to different locking stages formed by the cogging, for the purpose of being able to modify the angle of the inlay (see the translation of Chauvin page 1, pars.6, 15, and 16). The cogging of Chauvin allows for alignment of the articulating surface of the inclined inlay in a frontal and sagittal plane of the patient, and the cogging does not preclude alignment of the joint as a whole from being aligned in both the frontal and sagittal plane of the patient.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the hip socket of Kubein-Meesenburg to include separate socket and inlay components, as is well known in the art to allow the polymer bearing component to be replaced as needed, and to allow for these components to be affixable in different positions as taught by Chauvin in order to accommodate various patient anatomy with angular adjustment of the articulating surface.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubein-Meesenburg in view of Chauvin as applied to claim 10 above, and further in view of Serbousek et al. 5,009,665 (hereafter referred to as Serbousek). Kubein-Meesenburg in view of Chauvin discloses the invention substantially as claimed and as discussed above, however, Kubein-Meesenburg in view of Chauvin does not disclose that the inlay is securable by a shrinkage connection.

Serbousek teaches an acetabular cup, in the same field of endeavor, wherein the inlay is inserted into the socket while it is shrunken for the purpose of allowing it to be easily placed into the socket and be secured therein (col.3, ll.47-50).

It would have been obvious to one of ordinary skill in the art to modify the connection between the socket and inlay described by Kubein-Meesenburg in view of Chauvin and use a shrinkage connection as this is a well known means for securing an inlay into a socket as taught by Serbousek.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Megan Wolf whose telephone number is (571)270-3071. The examiner can normally be reached on Monday-Friday 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. W./
Examiner, Art Unit 3738

/Corrine M McDermott/
Supervisory Patent Examiner, Art Unit 3738